Appl. No.: 10/813,899
Filing Date: March 31, 2004
Group Art Unit: 3738
Examiner: Suba Ganesan
Atty. Docket No.: 101896-662 (DEP5055)

REMARKS

The Office Action addresses claims 1-4, 6-10, 12, 13, and 54-66, of which claims 1-4, 6, 7, 9, 10, 12, 13, 54-61, and 63-66 stand rejected and claims 8 and 62 are objected to as dependent upon a rejected base claim. Claims 14-53 were previously withdrawn. Reconsideration is respectfully requested in view of the following remarks.

At the outset, Applicants thank Examiner Ganesan for the courtesy of a telephone interview on November 20, 2008, with the undersigned attorney for Applicants. During the interview agreement was reached that the primary reference, U.S. Patent No. 6,224,607 to Michelson, does not embed in a face of a vertebral body and thus the reference does not anticipate the claimed invention.

Amendments to the Claims

Applicants amend claim 66 to fix a typographical error. In particular, claim 66 was recited as depending from claim 12, but as indicated in the Response dated October 30, 2007, claim 66 should depend from claim 56. Applicants now fix this typographical error to recite that claim 66 depends from claim 56. No new matter is added.

Claim Objections

The Examiner objects to claim 66 because it is the same as claim 13. Prior to the amendment, both claims 13 and 66 depended from claim 12 and recited identical limitations.

Applicants now amend claim 66 so that it depends from claim 56, thereby obviating this objection.

Rejections Pursuant to 35 U.S.C. § 102(b)

The Examiner rejects claims 1, 2, 6, 7, 9, and 10 pursuant to 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 6,224,607 to Michelson ("Michelson"). The Examiner argues that Michelson teaches each recitation of the claimed anterior method. Applicants respectfully disagree.

Claim 1 is directed to a method for implanting an artificial disc in an intervertebral space in which a portion of a midline marker *embeds* in a face of a vertebral body to mark a midline thereof and the midline marker is used as a guide to insert both a distraction instrument and an artificial disc

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in an intervertebral space. As agreed upon during the interview of November 20, 2008, Michelson fails to identically disclose, let alone suggest, a method in which a midline marker embeds in a face of a vertebral body. The methods taught by Michelson uses dye to mark a vertebral midline. More specifically, Michelson teaches inserting a midline marker (100) "into the disc material contained in the disc space between two adjacent vertebral bodies." (Col. 9, lines 40-42, emphasis added.) In fact, a shoulder (108) of the marker (100) is configured to butt against the anterior aspect of the adjacent vertebral bodies to prevent unwanted over penetration of an insertion tip (104) of the marker (100) into the disc space. (Col. 9, lines 42-46.) After the marker (100) is inserted into the disc space, dye is injected through the marker (100) and out of dye exit holes (110) to create reference marks (118) at the vertebral midline on the adjacent vertebral bodies and on the disc material. (Col. 9, line 58 to Col. 10, line 2, emphasis added.) Prior to inserting any other instruments, marker (100) is removed from the disc space. (Col. 10, lines 4-9.)

Accordingly, at least because Michelson fails to teach or even suggest a method in which a midline marker *embeds in a face of a vertebral body*, claim 1, as well as claims 2, 6, 7, 9, and 10 which depend therefrom, distinguishes over Michelson and represents allowable subject matter.

Rejections Pursuant to 35 U.S.C. § 103(a)

Michelson

The Examiner rejects claims 3, 4, 56-61, 63, and 64 pursuant to 35 U.S.C. § 103(a) as being obvious over Michelson. Applicants respectfully disagree.

At least because claims 3 and 4 depend from an allowable base claim and the rejection pursuant to 35 U.S.C. § 103(a) cites no further prior art, claims 3 and 4 represent allowable subject matter.

With respect to independent claim 56, as well as claims 57-61, 63, and 64 which depend therefrom, as explained with respect to independent claim 1, Michelson at least fails to teach a method in which a midline marker *embeds in a face of a vertebral body*. Still further, as further recited by independent claim 56, the method includes fixing a position of a midline marker such that a portion of the midline marker embeds in a face of only a single vertebral body. At least because

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Michelson fails to teach a method in which a midline marker embeds in any face of any vertebral body, Michelson also does not teach or even suggest embedding a midline marker in a face of only a single vertebral body.

Accordingly, independent claim 56, as well as claims 57-61, 63, and 64 which depend therefrom, distinguishes over Michelson and thus represent allowable subject matter.

Michelson in view of Nolan

The Examiner rejects claims 12, 13, 54, 55, 65, and 66 pursuant to 35 U.S.C. § 103(a) as being obvious over Michelson in view of U.S. Patent No. 6,117,174 of Nolan ("Nolan"). The Examiner argues that Michelson teaches the claimed invention except for implanting an artificial disc with endplates, a core, and a retention clip, and relies on the teachings of Nolan to remedy such deficiencies. Applicants respectfully disagree.

Claim 54 is an independent claim and claim 55 depends therefrom. Claims 12 and 13 depend from independent claim 1 and claims 65 and 66 depend from independent claim 56. Regardless of whether Nolan teaches the deficiencies of Michelson noted by the Examiner, Nolan fails to remedy the previously discussed deficiency of Michelson that it does not teach a method in which a midline marker embeds in a face of a vertebral body. Nolan, in fact, does not include any device for or method of marking a midline.

Accordingly, independent claim 54, as well as claim 55 which depends therefrom, claims 12 and 13, which depend from allowable independent claim 1, and claims 65 and 66, which depend from allowable independent claim 56, distinguish over Michelson in view of Nolan and thus represent allowable subject matter.

Allowable Subject Matter

The Examiner objects to claims 8 and 62 as being dependent upon rejected base claims 1 and 56, respectively. At least because each of claims 1 and 56 represent allowable subject matter, claims 8 and 62 are also allowable.

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Conclusion

Applicants submit that all claims are in condition for allowance, and allowance thereof is respectfully requested. The Examiner is encouraged to telephone the undersigned attorney for Applicants if such communication is deemed to expedite prosecution of this application.

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Respectfully submitted

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